

Abstract

A novel antibiotic-producing *Streptomyces* sp. is provided that exhibits antifungal activity only on certain specific plant pathogens. Also provided is a method of treating or protecting plants from fungal infections comprising applying an effective amount of an antibiotic-producing *Streptomyces* sp. having all the identifying characteristics of NRRL Accession number B-30145. The invention also relates to fungicidal compositions comprising this novel *Streptomyces* strain and the antibiotics and metabolites produced by this strain either alone, or in combination with other chemical and biological pesticides.